

Scripts for controlling RHIC power supplies.

Usage: type ~wing/script-name

- 1) Brings the permit-link up.
 - a) blueUp - If the blue link is down, then attempts to bring it up by setting PS, Quench sw, trimquads to proper states.
 - b) yellowUp - If the yellow link is down, then attempts to bring it up by setting PS, QD sw, trimquads to proper states.
- 2) IR power supplies
 - a) bluePsOn - Turns on all blue IR power supplies in bldgs 2B, 4B, 6B, 8B, 10A and 12A.
 - b) yellowPsOn - Turns on all yellow IR power supplies in bldgs 2B, 4B, 6B, 8B, 10A and 12A.
- 3) Sextupole power supply controls
 - a) sext1BOn - Turns on both the blue and yellow sextupole power supplies (all 4 in alcove 1B).
 - b) sext3BOn - Turns on both the blue and yellow sextupole power supplies (all 4 in alcove 3B).
 - c) sext5BOn - Turns on both the blue and yellow sextupole power supplies (all 4 in alcove 5B).
 - d) sext7BOn - Turns on both the blue and yellow sextupole power supplies (all 4 in alcove 7B).
 - e) sext9BOn - Turns on both the blue and yellow sextupole power supplies (all 4 in alcove 9B).
 - f) sext11BOn - Turns on both the blue and yellow sextupole power supplies (all 4 in alcove 11B).
 - g) sextAllOn - Turns on both the blue and yellow sextupole power supplies (all 6 alcoves 24 supplies).
 - h) sextOn <site-wide-name> - Turns on the specific "site-wide name" power supply. Script will not execute if ps is on.
e.g. Type sextOn bil-sxd-ps will turn on alcove bil-sxd power supply.
If the ps is already in the ON state, then the script will terminate and inform user that the ps is already on.
- 4) TrimQuad power supply controls
 - a) blueTq2BOn - Turns on blue trim quads power supplies (all 6 tq in bldg 2B).
 - b) blueTq4BOn - Turns on blue trim quads power supplies (all 6 tq in bldg 4B).
 - c) blueTq6BOn - Turns on blue trim quads power supplies (all 6 tq in bldg 6B).
 - d) blueTq8BOn - Turns on blue trim quads power supplies (all 6 tq in bldg 8B).
 - e) blueTq10Aon - Turns on blue trim quads power supplies (all 6 tq in bldg 10A).
 - f) blueTq12Aon - Turns on blue trim quads power supplies (all 6 tq in bldg 12A).
 - g) yellowTq2BOn - Turns on yellow trim quads power supplies (all 6 tq in bldg 2B).
 - h) yellowTq4BOn - Turns on yellow trim quads power supplies (all 6 tq in bldg 4B).
 - i) yellowTq6BOn - Turns on yellow trim quads power supplies (all 6 tq in bldg 6B).
 - j) yellowTq8BOn - Turns on yellow trim quads power supplies (all 6 tq in bldg 8B).
 - k) yellowTq10Aon - Turns on yellow trim quads power supplies (all 6 tq in bldg 10A).
 - l) yellowTq12Aon - Turns on yellow trim quads power supplies (all 6 tq in bldg 12A).
 - m) tqOn <site-wide-name> Turns on the specific power supply. Script will not execute if ps is already on.
e.g. Type tqOn yo9-tq6-ps will turn on building 10A tq6 power supply.
If the ps is already in the ON state, then the script will terminate and inform user that the ps is already on.
- 5) Recover from power dip - After power dip, the IR power supply's SCR firing sequence is not working properly. Recycling the input power will fix the problem.
 - a) bluePowerDipRecover - Recycle every blue IR power supplies in all 6 service buildings.
 - b) yellowPowerDipRecover - Recycle every yellow IR power supplies in all 6 service buildings.
- 6) Snake magnet power supply controls
 - a) SnakeOn - Turns on both 400-amps snake magnet power supplies.
- 7) Data Store
 - a) blue10HzStore - Selects the 10Hz data store on all blue Quench Detection chassis (12).
 - b) blue15HzStore - Selects the 15Hz data store on all blue Quench Detection chassis (12).
 - c) blue20HzStore - Selects the 20Hz data store on all blue Quench Detection chassis (12).
 - d) blue30HzStore - Selects the 30Hz data store on all blue Quench Detection chassis (12).
 - e) blue60HzStore - Selects the 60Hz data store on all blue Quench Detection chassis (12).
 - f) yellow10HzStore - Selects the 10Hz data store on all yellow Quench Detection chassis (12).
 - g) yellow15HzStore - Selects the 15Hz data store on all yellow Quench Detection chassis (12).
 - h) yellow20HzStore - Selects the 20Hz data store on all yellow Quench Detection chassis (12).

- i) yellow30HzStore - Selects the 30Hz data store on all yellow Quench Detection chassis (12).
- j) yellow60HzStore - Selects the 60Hz data store on all yellow Quench Detection chassis (12).

8) Slow Log

- a) blueSlog1s - Sets slog to 1s rate on all blue QD chassis (12).
- b) blueSlog10s - Sets slog to 10s rate on all blue QD chassis (12).
- c) blueSlog1m - Sets slog to 1 minute rate on all blue QD chassis (12).
- d) blueSlogOff - Turns off all blue slog (12).
- e) yellowSlog1s - Sets slog to 1s rate on all yellow QD chassis (12).
- f) yellowSlog1m - Sets slog to 10s rate on all yellow QD chassis (12).
- g) yellowSlog10s - Sets slog to 1minute rate on all yellow QD chassis (12).
- h) yellowSlogOff - Turns off all yellow slog (12).
- i) SlogOff - Turns OFF all slog, both blue and yellow QD chassis (18).

9) Spin Rotator Power Supply

- a) rot5COn - Turns on all blue and yellow spin-rotator power supplies (all 4 in alcove 5C).
- b) rot7AOn - Turns on all blue and yellow spin-rotator power supplies (all 4 in alcove 7A).
- c) rot7COn - Turns on all blue and yellow spin-rotator power supplies (all 4 in alcove 7C).
- d) rot9AOn - Turns on all blue and yellow spin-rotator power supplies (all 4 in alcove 9A).
- e) rotOn <sitewide-name> - Turns on the specific power supply. Script will bypass the sequence if ps is already on.
 - e.g. Type rotOn bi5-rot3-1.4-ps will turn on alcove 5C spin-rotator power supply.
 - If the ps is already in the ON state, then the script will terminate and inform user that the ps is already on.